

TECHNICAL INFORMATION**POLIMAL[®]****T104 WTP LP****Application**

Polimal[®] T104 WTP LP is designed for production of polyester – glass molds. It is also recommended for production of polyester – glass laminates with lower flammability.

Resin characteristics

Polimal[®] T104 WTP LP is non-shrinking, accelerated, thixotropic, filled, tooling resin with colourful curing indicator. This resin shows very good glass fiber wetting and impregnation features.

Advantages of using:

- Low polymerization shrinkage
- Very good deaeration and wetting
- Favorable curing characteristics
- Low peak temperature
- Contains colourful curing indicator
- It is possible to laminate by “wet on wet” method and receive laminate in one single production cycle.

Typical parameters

Parameter	Unit	Value
Viscosity at 25°C Brookfield, sp. 21/rpm.2	cP	1 800 ÷ 3 000
Viscosity at 25°C Brookfield, sp. 21/rpm. 20	cP	750 ÷ 1200
Gel time at 25°C 2% Luperox [®] K-1 S	min	15 ÷ 30
Gel time at 25°C 1,5% Luperox [®] K-1 S	min	25 ÷ 50
Guarantee period	month	3

Storage conditions

Polimal[®] T104 WTP LP should be stored in close package in a dry, shady and cool places, adapted for storing flammable materials at temperatures not exceeding 25°C.

Processing conditions

The resin should be mixed precisely before use. Good curing required ambient temperature above 18°C and low air humidity. The best curing conditions are obtained using 2% MEKP as hardener. It is possible to adjust gel time by varying of amount of hardener, the best within in the range of 1 – 2 %. The final curing could be optimize by postcuring at elevated temperatures.

Polimal[®] is the trade name reserved for unsaturated polyester resins produced by **CIECH - Sarzyna S.A.**

Luperox[®] is the trade name registered for products of **ARKEMA** company.

Data and suggestions included in this document are on the basis of our own tests and are considered by us as reliable. However, we cannot take any responsibility for actions and losses directly or indirectly resulted from using our products. User should check the product quality, safety and properties before its using.

Note:

The information does not substitute Material Safety Data Sheet or Technical Specification, which are superior documents and are available on the customer's request.

TECHNICAL INFORMATION

POLIMAL[®]

T104 WTP LP

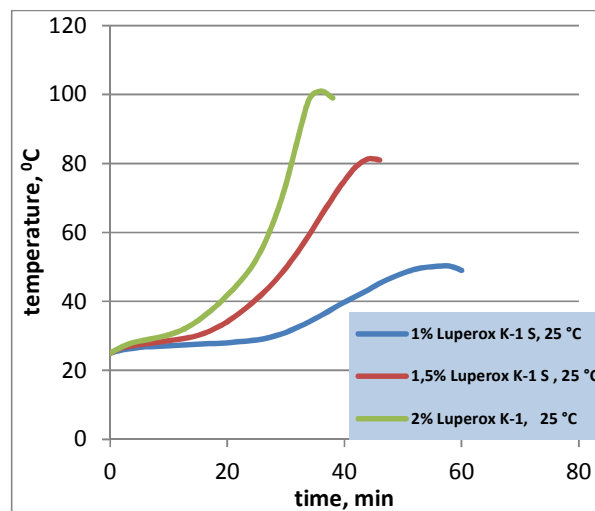
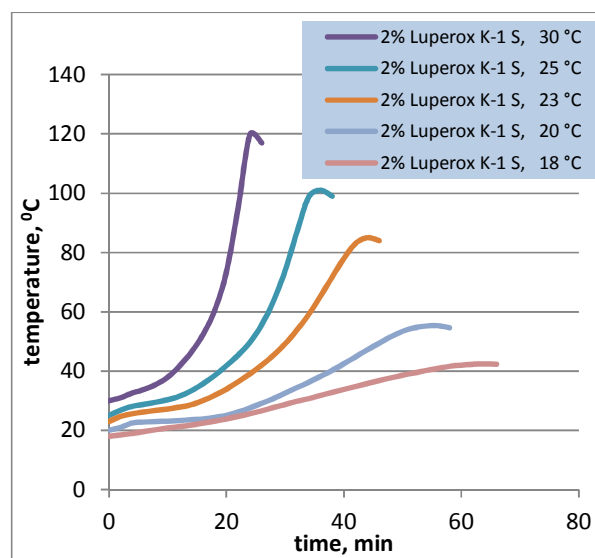
Mechanical parameters of Polimal T104 WTP LP

Parameter	Unit	Value
Flexural strength acc. to ISO 178	MPa	55
Flexural modulus acc. to ISO 178	MPa	4000
Stress at break acc. to ISO 527	MPa	36
Tensile modulus acc. to ISO 527	MPa	4500
Heat deflection temperature, HDT acc. to ISO 75	°C	85
Barcol hardness acc. to ASTM 2583-07	°B	52
Volumetric polymerization shrinkage (of casting)	%	< 1
Density	g/cm ³	1,35

Post-curing: 2h at 80°C

Example of laminate characteristics

Construction of laminate	Polimal T104 WTP LP
	Glass mat „150” – 1 layer
	Glass mat „300” – 3 layer
	Glass mat „450” – 4 layer
Composition by weight resin : glass mat	73 : 27
Estimated weight of laminate, kg/m ²	10 ÷ 11

Reactivity of Polimal T104 WTP LP in function of hardener amount

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